

### REMARKS

The issues outstanding in the Office Action mailed December 31, 2002, are the requirement for restriction and rejections under 35 U.S.C. §112 and §103. Reconsideration of these issues, in view of the following discussion, is respectfully requested.

#### Requirement for Restriction

The traversal of the restriction requirement is maintained, for the reasons of record. Moreover, it is urged that, once the catalyst claims are found to be allowable, the process claims of Group II should be rejoined. See MPEP §821.04.

#### Rejection Under 35 U.S.C. §112

The Examiner is thanked for pointing out the typographical error in claim 1, which has been corrected by the foregoing amendments. Various other typographical corrections have been made. The scope of the claims have not been changed by these amendments. Withdrawal of the rejection under 35 U.S.C. §112 is respectfully requested.

#### Rejection Under 35 U.S.C. §103

Claims 1-11 and 17-21 are rejected under 35 U.S.C. §103 over newly cited Chauvin et al. '305 (referred to in the Office Action as "Chauvin II") taken with Chauvin '571 (referred to as "Chauvin I"). Reconsideration of this rejection is respectfully requested.

Chauvin II discloses a catalyst which is a combination of bivalent nickel, and aluminum hydrocarbyl halide and a Bronsted acid. Although the Office Action argues that this patent discloses the invention "essentially as claimed," as the Office Action admits, this patent does not disclose mixing of the reagents for any particular time or any particular temperature. Moreover, the patent does not disclose "pre-conditioning" in a solvent as in claim 21. Thus, the patent does not disclose the process of the present claims. The Office Action argues, however, that pre-conditioning is taught by Chauvin I, which is argued to disclose overlapping reaction times and temperatures with the embodiment of the process recited in claim 1. Applicants respectfully

disagree with this analysis.

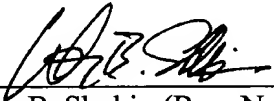
Chauvin I is directed to a catalyst composition comprising a nickel component, an aluminum hydrocarbyl halide and an epoxy compound. Patentees teach, at col. 1, lines 42-45, that "if at least one divalent nickel compound is placed into contact with at least one hydrocarbylaluminum halide and at least one epoxy compound, this will lead to a catalytic composition more active than prior art formulations." Thus, the catalysts of these two patents are fundamentally different, one containing a Bronsted acid and one containing an epoxy compound. Chauvin I teaches that the epoxy compound plays a role in the production of the "more active" catalytic composition, as noted above. Thus, this patent can teach nothing with respect to the preparation of the wholly different catalyst of Chauvin II, which contains a Bronsted acid. Indeed, the argument at page 3 of the Office Action that "[a]ll that appears to occur in the present invention is the recognition that it takes some time for the nickel catalyst to become fully activated by the aluminum co-catalyst," is an overstatement in that it neglects Chauvin I tying the presence of the epoxy compound into the reaction. On information and belief, the mixing step in Chauvin I serves to entail a reaction between the nickel compound and the epoxy compound. Thus, no generalization from this disclosure can be made to the different catalysts of the primary reference.

It is accordingly submitted that the combination of references fails to establish even a *prima facie* case of obviousness, in view of the different nature of the catalysts therein. One of ordinary skill in the art simply has no motivation to generalize the mixing step of one catalyst for production of a different catalyst. Moreover, it is submitted that the example and comparative examples of the present specification provide further evidence of the non-obviousness of such combination. In the examples, a catalyst prepared without pre-conditioning as in the present claims (comparative Example 1) is compared to a catalyst pre-conditioned in accordance with the claims (Examples 2 and 3). It is shown, in oligomerization the processes in the examples, that significantly improved conversion is obtained with the pre-conditioned catalyst in accordance with the invention. It is respectfully submitted that this provides further basis for the patentability of the present invention.

The claims of the application are submitted to be in condition for allowance. However, if the Examiner has any questions or comments, he is cordially invited to telephone the undersigned at the number indicated below.

The Commissioner is hereby authorized to charge any fees associated with this response or credit any overpayment to Deposit Account No. 13-3402.

Respectfully submitted,

  
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